

TOBACCO INDUSTRY RESEARCH COMMITTEE
150 EAST FORTY SECOND STREET NEW YORK 17, N.Y.

Application For Research Grant

#182

Date:

September 3rd, 1957

1. Name of Investigator:

Stanley C. Skoryna, M.D.

2. Title:

Research Director, Department of Experimental Surgery.

3. Institution:

& Address:

McGill University, Montreal, Canada.

4. Project or Subject:

Effects of Application of Tobacco Tars on Buccal Mucosa.

5. Detailed Plan of Procedure (Use reverse side if additional space is needed):

The objective of this project is to obtain data on the carcinogenic properties of the tobacco tars in relation to buccal mucosa. The differences in carcinogenic response between skin and mucous membranes appear to be of significance in tobacco-tar carcinogenesis. The hamster cheek pouch seems in many ways admirably suited for the studies outlined.

In preliminary investigations carried out in our Laboratories, it has been established that (1) tobacco tars solutions (including saturated solution) do not induce malignant or benign tumors of the mucous membrane of the hamster's cheek pouch, (2) 9, 10 dimethyl 1,2 benzantracene is capable of inducing benign and malignant tumors under similar experimental conditions.

In the proposed program it is planned to carry out the following studies:

1. To enlarge and repeat the experiments with application of saturated solutions of tobacco tars and 9, 10 dimethyl 1, 2 benzantracene.
2. To investigate possible significance of tobacco tars as initiating and promoting agents by a) application of saturated tobacco tars solution following a known initiating agent (benzantracene), b) single tobacco tars application ~~following a known promoting agent (aroton oil)~~ followed by repeated application of a promoting agent (aroton oil).
3. To investigate the effects of cigar tars solution on buccal mucosa.
4. To investigate the effects of pipe tobacco tars on buccal mucosa.
5. To study the effects of tobacco tars on the growth of a hamster sarcoma transplanted into the cheek pouch.
6. To study histopathological and histochemical changes in relation to particular tissue components such as elastic tissue, reticulo-endothelial system and mucopolysaccharides. These studies would be carried during the next session not the current.

1003541202

6. Budget Plan:

Salaries	
Expendable Supplies	\$4,600
Permanent Equipment	3,200
Overhead	1,400
Other	600
Total	\$9,800

7. Anticipated Duration of Work:

8. Facilities and Staff Available: **2-3 years.**

The Experimental Surgical Laboratories are well equipped, also a Biochemical Laboratory. Various projects in experimental carcinogenesis have been carried out in these laboratories for the past 10 years.

9. Additional Requirements:

None

10. Additional Information (Including relation of work to other projects and other sources of supply):

Work is being carried out on various projects in chemical carcinogenesis, including carcinogenic activity of radioactive isotopes, under the auspices of the National Cancer Institute, National Research Council and Public Health Department.

Signature _____

Director of Project

/s/ Stanley C. Shoryna

Business Officer of the Institution

Vice President

1003541203